2005 NATIONAL COMPUTER SECURITY SURVEY

RETURN COMPLETED FORM TO: RAND Corporation Survey Research Group 1776 Main Street P.O. Box 2138 Santa Monica, CA 90407-2138

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For assistance Phone: 1-800-734-5399 Monday through Friday 8:00 a.m. to 5:00 p.m. Pacific Time OR

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NOTICE OF CONFIDENTIALITY—Your report is confidential by law (P.L. 107-347, Title V and 44 U.S.C. § 3501 note). It may be seen only by persons certified to uphold the confidentiality of information and used only for statistical purposes from which no firm may be identified. The law also prohibits the sharing of your data with other agencies, exempts the information you provide from requests made under the Freedom of Information Act, and ensures that your responses are immune from legal process.



U.S. DEPARTMENT OF JUSTICE **BUREAU OF JUSTICE STATISTICS**

In partnership with the



U.S. DEPARTMENT OF HOMELAND SECURITY NATIONAL CYBER SECURITY DIVISION

SURVEY SCOPE

This voluntary survey collects data on the type and frequency of computer security incidents in which a computer was used as the means of committing a crime against the company.

REPORTING ENTITY

Report consolidated figures for DOMESTIC OPERATIONS of this company, including all DIVISIONS and LOCATIONS, and excluding SUBSIDIARIES. Use figures that include subsidiaries only if figures excluding subsidiaries are not available. For this survey, subsidiary means a company in which this company has more than 50% ownership, or in which this company has the power to direct or cause the direction of management and policies.

REPORTING PERIOD

The reporting period for this survey is CALENDAR YEAR 2005. If 2005 calendar year figures are not available, please use fiscal year 2005 data.

If exact figures are not available, estimates are acceptable.

Use a dark colored pen to fill out the survey. Completely fill in the squares or circles to indicate your responses. To indicate an answer selected in error, draw a heavy "X" over the square or circle. When reporting a number, avoid writing on the edge of the response box. Please refer to the instructions on page 14 before completing the survey.

I. COMPUTER SECURITY CONCERNS

a.	What are the top three computer security concerns for this company? Mark ■ up to three.					
	Computer virus, worm, or Trojan horse					
	Denial of service					
	Electronic vandalism or sabotage					
	☐ Embezzlement					
	Fraud					
	☐ Theft of intellectual property (copyrights, patents, trade secrets, trademarks)					
	Unlicensed use or copying (piracy) of digital products—software, music, motion pictures, etc.—developed for resale					
	☐ Theft of personal or financial information such as names and dates of birth; social security numbers; credit/debit/ATM card, account, or PIN numbers; etc.					
	Other computer security incidents such as hacking, spoofing, phishing, sniffing, pinging, scanning, spyware, adware, other malware, etc.					
	☐ Misuse of computers by employees (Internet, e-mail, etc.)					
	☐ Breaches resulting from information obtained from stolen laptops					
	☐ Other→ Specify:					
b.	What three potential sources of computer security threat are of greatest concern to this company? <i>Mark</i> ■ <i>up to three</i> .					
	Current employee					
	Current contractor, vendor, temporary worker, etc.					
	Former employee, contractor, vendor, temporary worker, etc.					
	☐ Domestic competitor					
	Foreign competitor					
	☐ Domestic hacker					
	Foreign hacker					
	☐ Other→ Specify:					

II. COMPUTER INFRASTRUCTURE & SECURITY

2a.	In 2005, what types of computer networks (including Internet) or equipment did this company use? For this survey, "company" means DOMESTIC OPERATIONS, including all DIVISIONS and LOCATIONS. Mark all that apply.							
	☐ Local area network (LAN) ☐ Intranet							
	☐ Wide area network (WAN)	☐ Extranet						
	Process control network (PCN)	Stand-alone PCs (not on LAN)						
	☐ Virtual private network (VPN)	Company-owned laptops						
	☐ Wireless network (e.g.,802.11)	Laptops not owned by company						
	☐ Electronic data interchange (EDI)	☐ Other→ Specify:						
	☐ Internet							
b.	In 2005, what types of network accessupport? Mark all that apply.	ess did this company						
	☐ Hard-wired telecommunications lines							
	Remote dial-in access via telecommunic	cations lines						
	Access to company networks or e-mail t	hrough Internet						
	☐ Wireless access to e-mail							
	☐ Wireless access to Internet							
	☐ Wireless access to this company's data or other networks							
	☐ Publicly accessible website WITHOUT €	-commerce capabilities						
	☐ Publicly accessible website WITH e-con	nmerce capabilities						
	Other -> Specify:							





II. COMPUTER INFRASTRUCTURE & SECURITY - Continued

	In 2005, what types of computer s technology did this company use		 b. In 2005, what computer security functions did this company outsource? INCLUDE fully and/or partially outsourced functions. Mark ■ all that apply. 					
	Anti-virus software	☐ DMZ Host	☐ Business continuity plan for computer systems					
	Anti-spyware/adware software	☐ Intrusion Detection System	☐ Disaster recovery plan for computer systems					
	Biometrics	☐ Intrusion Protection System	Corporate policy on computer security					
	One-time password generators (smartcards, tokens, keys)	E-mail logs or filters	☐ Identification of company's critical assets					
	Passwords that must be	System administrative logs	☐ Vulnerability/risk assessment					
	changed periodically Digital certificates	☐ Encryption	☐ Intrusion/penetration testing of computer security					
	Firewall	☐ Other → Specify:	_					
	Filewali		Computer/network watch center					
b.	In 2005, how much did this compa	any spend on the types of computer	Configuration management					
	system security technology identified in 3a?	Mil. Thou. Dol.	Regular review of system/security administration logs					
	ESTIMATES are acceptable.	000	Periodic computer security audits					
	EXCLUDE personnel costs. \$		Formal computer security audit standards					
			Physical/environmental security (e.g., limited physical access, sprinklers)					
	What percentage of this company Technology budget did this comp		Personnel policies (e.g., background checks, transfer, termination)					
	of computer system security tech		☐ Training employees in computer security practices					
	ESTIMATES are acceptable. Round to nearest whole percent.	%	Equipment decommissioning					
	Round to nearest whole percent.	/6	☐ Other → Specify:					
d. V	What types of computer system se	curity technology does this	☐ None; all computer security was done in-house					
	company plan to add in 2006?	about a visa almost a constant a constant						
	EXCLUDE updates or upgrades of te Mark all that apply.	chnologies already used in 2005.	c. If this company had a computer system business continuity or disaster recovery plan, was it tested, used in an emergency situation and/or updated in 2005?					
Г	Anti-virus software	☐ Intrusion Detection System						
Г	Anti-spyware/adware software	☐ Intrusion Protection System	Mark ■ all that apply.					
Г	Biometrics		☐ Tested in 2005					
	One-time password generators	System administrative logs	Used in emergency situation in 2005					
_	(smartcards, tokens, keys)	☐ Encryption	Updated in 2005					
L	Passwords that must be changed periodically	☐ Other → Specify:	Had plans but did not test, use, or update in 2005					
	Digital certificates		☐ Other → Specify:					
	Firewall	Do not plan to add any new	Not applicable; did not have these plans in 2005					
	DMZ Host	technologies in 2006						
	n 2005, what types of computer secompany have? Mark ■ all that app	ly.	d. In 2005, how frequently did this company conduct formal vulnerability/risk assessments prior to implementing new applications, systems, or programs? Mark ■ all that apply.					
L	☐ Business continuity plan for computer s		│					
L	Disaster recovery plan for computer sys	stems	More than half the time					
L	Corporate policy on computer security		Less than half the time					
L	Identification of company's critical asse	ts	☐ When required by law					
L	Vulnerability/risk assessment		☐ Other → Specify:					
L	Intrusion/penetration testing of compute	er security						
L	Computer/network watch center		☐ Never					
L	Configuration management		Did not implement any new applications, systems, or programs in 2005.					
	Regular review of system/security admi	inistration logs	e. In 2005, did this company track downtime caused by any					
	Periodic computer security audits		computer security incidents?					
	Formal computer security audit standar	rds	○ Yes					
	Physical/environmental security (e.g., li	mited physical access, sprinklers)	○ No					
	Personnel policies (e.g., background ch	necks, transfer, termination)						
	Training employees in computer securit	ty practices						
	Equipment decommissioning							
	☐ Other → Specify:							
			10-00					



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III. TYPES OF COMPUTER SECURITY INCIDENTS

The questions in this section pertain to computer security incidents against this company, where the word "incident" refers to any unauthorized access, intrusion, breach, compromise or use of this company's computer system.

Computer security incidents may be committed by people either inside or outside the company and include computer virus, denial of service, vandalism, sabotage, embezzlement, fraud, theft of intellectual property, theft of personal or financial information, or other incidents such as hacking, spoofing, or spyware.

Please do NOT duplicate information. If an incident can be classified under multiple categories, report it under the FIRST applicable category. For example, if part of the company's computer system was deliberately damaged by means of a virus, report this under computer virus, not vandalism or sabotage.

ESTIMATES are acceptable.

5.

COMPUTER VIRUS A computer virus is a hidden fragment of computer code which propagates by inserting itself into or modifying other programs.	d. Through which of the following were the viruses introduced into this company's networks in these incidents? Mark all that apply.
INCLUDE viruses, worms, Trojan horses, etc.	Software installation
EXCLUDE spyware, adware, other malware, etc. Report these in 12 (Other Computer Security Incidents) on page 11.	☐ Files brought in on portable media such as floppy disks, CDs, or flash drives ☐ Files downloaded from the Internet ☐ Other → Specify:
a. In 2005, did this company intercept any computer viruses before they could infect any part of its computer systems?	☐ Don't know
YesNoDon't know	e. To which of the following organizations were these incidents reported? Mark ■ all that apply. □ Local law enforcement □ State law enforcement
b. Did this company detect any viruses which infected any part	FBI (Federal Bureau of Investigation)
of its computer systems in 2005?	US-CERT (United States Computer Emergency Readiness Team)
○ Yes → How many incidents were detected?	☐ Other Federal agency → Specify:
If a virus simultaneously infects a server and Number	CERT® Coordination Center
one of more Pos, count this as one modeln.	☐ ISAC (Information Sharing and Analysis Center)
\bigcirc No \Longrightarrow (If "No", skip to 6.)	☐ InfraGard
	☐ None of the above
c. Which of the following types of security technology or practices were inadequate in preventing these incidents? Mark ■ all that apply.	f. How many of these incidents were reported to the organizations specified in 5e?
☐ Internal computer security controls ☐ Encryption	Number
☐ External computer security controls ☐ Software vulnerability/buffer overload	
☐ Anti-Virus software ☐ E-mail filters or review of e-mail logs	g. If any incidents were not reported to the organizations specified
☐ Anti-spyware/adware software ☐ Review of system/security admin logs	in 5e, what were the reasons? Mark ■ all that apply.
☐ Biometrics ☐ Computer network/watch center	Handled internally
☐ One-time password generators ☐ Configuration management	Reported to third party contractor providing computer security services
☐ Passwords that must be changed ☐ Physical/environmental security	☐ Reported to another organization → Specify:
☐ Digital certificates ☐ Personnel policies	☐ Negative publicity
☐ Firewall ☐ Authorized access misused	Lower customer/client/investor confidence
\square DMZ Host \square Other \longrightarrow Specify:	☐ Competitor advantage
☐ Intrusion Detection System	☐ Did not want data/hardware seized as evidence
☐ Intrusion Protection System ☐ Don't know	☐ Did not know who to contact
	☐ Incident outside jurisdiction of law enforcement
	☐ Did not think to report
	☐ Nothing to be gained/nothing worth pursuing

 \square Other \longrightarrow Specify:

h. What was the relationship between the suspected offender (the person who sent or created the virus) and this company at the time of the incidents indicated in 5b? Mark all that apply.					
☐ Insider - someone currently (or formerly) working for this company					
Current employee					
Current contractor, vendor, temporary worker, etc.					
Former employee, contractor, vendor, temporary worker, etc.					
Outsider - someone who never worked for this company					
☐ Domestic competitor					
\square Foreign competitor $ o$ Specify country:					
Domestic hacker					
☐ Foreign hacker → Specify country:					
Other hacker (origin unknown)					
☐ Other → Specify:					
☐ Don't know					
 i. What was the total downtime (in hours) for each of the following due to these virus infections? ESTIMATES are acceptable. INCLUDE downtime needed for repair. 1. Downtime of servers, routers or switches 					
Downtime of individual PCs/workstations Hours EXCLUDE network downtime reported above in item i,1.					
j. How much was spent in 2005 to recover from these computer viruses? ESTIMATES are acceptable. INCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such					

k. What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable.

INCLUDE actual losses such as the value of lost information. INCLUDE the estimated value of downtime, lost productivity,

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\$					000			

downtime, lost productivity, income from lost sales, labor or fees for legal or investigative work, etc.

☐ CERT® Coordination Center

☐ InfraGard ■ None of the above

☐ ISAC (Information Sharing and Analysis Center)

6.	DENIAL OF SERVICE				
	Denial of service is the disruption, degradation, or exhaustion of an Internet connection or e-mail service that results in an interruption of the normal flow of information. Denial of service is usually caused by ping attacks, port scanning probes, excessive amounts of incoming data, etc.				
	EXCLUDE incidents already report on page 3.	red under 5 (Computer Virus)			
a.	Did this company detect any inci (a noticeable interruption of its In e-mail service) in 2005?				
	\bigcirc Yes \Longrightarrow How many incidents w	ere detected?			
	\bigcirc No \Longrightarrow (If "No", skip to 7.)	Number			
b.	Which of the following types of s were inadequate in preventing the	security technology or practices sees incidents? Mark ■ all that apply			
	☐ Internal computer security controls	Encryption			
	☐ External computer security controls	Software vulnerability/buffer overload			
	Anti-virus software	E-mail filters or review of e-mail logs			
	Anti-spyware/adware software	Review of system/security admin log			
	Biometrics	Computer network/watch center			
	One-time password generators	Configuration management			
	Passwords that must be changed	Physical/environmental security			
	Digital certificates	Personnel policies			
	Firewall	Authorized access misused			
	☐ DMZ Host	\square Other \Longrightarrow Specify:			
	☐ Intrusion Detection System				
	☐ Intrusion Protection System	☐ Don't know			
c.	Which of the following were used incidents? Mark ■ all that apply.	d, accessed, or affected in these			
	Local area network (LAN)	☐ Intranet			
	☐ Wide area network (WAN)	Extranet			
	Process control network (PCN)	Stand-alone PCs (not on LAN)			
	☐ Virtual private network (VPN)	Company-owned laptop			
	☐ Wireless network (e.g.,802.11)	Laptop not owned by company			
	☐ Electronic data interchange (EDI)	\square Other \longrightarrow Specify:			
	☐ Internet				
		☐ Don't know			
d.	To which of the following organiz incidents reported? Mark ■ all the				
	Local law enforcement				
	State law enforcement				
	FBI (Federal Bureau of Investigation)				
	US-CERT (United States Computer I	Emergency Readiness Team)			
	☐ Other Federal agency → Specify:				

е.	How many of these incidents were reported to the organizations specified in 6d?	
f.	If any incidents were not reported to the organizations specified in 6d, what were the reasons? Mark all that apply.	n
	☐ Handled internally	
	Reported to third party contractor providing computer security services	
	☐ Reported to another organization → Specify:	
	☐ Negative publicity	
	Lower customer/client/investor confidence	
	Competitor advantage	
	Did not want data/hardware seized as evidence	
	☐ Did not know who to contact	
	☐ Incident outside jurisdiction of law enforcement	
	☐ Did not think to report	
	☐ Nothing to be gained/nothing worth pursuing	
	☐ Other→Specify:	
g.	What was the relationship between the suspected offender and the company at the time of the incidents indicated in 6a? Mark all that apply.	ıis
	☐ Insider - someone currently (or formerly) working for this company	
	Current employee	
	Current contractor, vendor, temporary worker, etc.	
	Former employee, contractor, vendor, temporary worker, etc.	
	Outsider - someone who never worked for this company	
	Domestic competitor	
	☐ Foreign competitor → Specify country:	
	☐ Domestic hacker	
	☐ Foreign hacker → Specify country:	
	Other hacker (origin unknown)	
	☐ Other → Specify:	
	☐ Don't know	
h.	What was the total duration (in hours) of the incidents of denial of service indicated in 6a? ESTIMATES are acceptable. Hours INCLUDE downtime needed for repairs.	
i.	How much was spent in 2005 to recover from these incidents of denial of service? ESTIMATES are acceptable. INCLUDE the cost - both internal and external - of diagnosis, repair, at replacement such as labor,	n
	hardware, software, etc. Mil. Thou. Dol.	
	EXCLUDE costs associated solely with the prevention of future incidents.	
j.	What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE the estimated value	
	of downtime, lost productivity, income from lost calcal labor.	
	income from lost sales, labor or fees for legal or \$ 0 0 0	
	investigative work, etc.	



ELECTRONIC VANDALISM OR SABOTAGE Electronic variation or abclinges the celleration of inations darkings the celleration of inations darkings the celleration of induction (Fig. 6d. att. web pages, programs, etc.			III. TYPES OF COMPUTER SEC	URITY INCIDENTS – Continued							
Indicates damage, delicaroment, destruction or other alteration of oldertracific files, data, who pages, programs, etc. EXCLUDE incidents already reported under 5 (Computer Virus) on page 8. EXCLUDE incidents of alteration which resulted in fraud. Report these in 9 (Fraud) to page 8. Biblithis company desect any incidents in which files, data, web pages or any part of its computer systems were electronically vandicated or absolaged in 2005? Virus → How many incidents were detected? Number In which of the following types of accurity technology or practices Biblithis company desect any incidents were detected? Number In which of the following system of security technology or practices Biblithis company desect any incidents were detected? Number In which of the following system of security technology or practices Anti-synamicolater southware in the security technology or practices Anti-synamicolater southware in security technology or practices Anti-synamicolater southware in security technology or practices Anti-synamicolater southware in security or southware southware in the security or southware southware in the security or southware southware in the security of the security or southware southware in the security of the security or southw	7.										
electronic files, data, web pages, programs, etc. EXCLUDE incidents already reported under 5 (Computer Virus) on page 3. BXCLUDE incidents of alteration which resulted in fraud. Report these in 9 (Fraud) on page 8. B. Did this company detect any incidents in which files, data, web pages or any part of its computer systems were electronically variable and any programs, ever electronically variable and any incidents were detected?											
EXCLUDE incidents already reported under 5 (Computer Virus) on page 3. EXCLUDE incidents of alternation which resulted in fraud. Report these in 9 (Fraud) on page 8. Exclude in 19 (Fraud) on page 9. Exclude in 19 (Fraud) on											
Report them in 8 (Fraud) on page 6. a. Did this company detect any incidents in which files, data, web pages or any part of its computer systems were electronically vanidatized or sabortaged in 20057 \[\text{Ves} \times \text{How many incidents were detected?} \[\text{No.} \times \text{Moreover files of the following types of security technology or practices were inadequate in preventing these incidents? Mork \(\below{\text{Moreover files} \) and that apply. Interest computer security controls \[\text{Rownell of the following types of security technology or practices were inadequate in preventing these incidents? Mork \(\below{\text{Moreover files} \) and that apply. Interest computer security controls \[\text{Rownell of the following types of security controls \[\text{No.} Rownell of the following types of security controls \[\text{Vest And sequential files or treview of F-mail lights or trev		, ,	ted under 5 (Computer Virus)								
Report them in 8 (Fraud) on page 6. a. Did this company detect any incidents in which files, data, web pages or any part of its computer systems were electronically vanidatized or sabortaged in 20057 \[\text{Ves} \times \text{How many incidents were detected?} \[\text{No.} \times \text{Moreover files of the following types of security technology or practices were inadequate in preventing these incidents? Mork \(\below{\text{Moreover files} \) and that apply. Interest computer security controls \[\text{Rownell of the following types of security technology or practices were inadequate in preventing these incidents? Mork \(\below{\text{Moreover files} \) and that apply. Interest computer security controls \[\text{Rownell of the following types of security controls \[\text{No.} Rownell of the following types of security controls \[\text{Vest And sequential files or treview of F-mail lights or trev		EVOLUBE: ::		Reported to third party contractor providing computer security services							
a. Did this company detect any incidents in which files, data, web pages or any part of its computer systems were electronically vanidatized or ablotaged in 2005? ○ Yes → Now many incidents were detected? ○ Now Now Now many incidents were detected? ○ Number ■ Which of the following types of security technology or practices were inadequate in preventing these incidents? Mork ■ all that apply. □ International products security controls □ Emorptions □ Anti-Virus software Emorptions □ Computer network value displayment of system/security admin logs □ Generation □ Computer network value of system/security admin logs □ Generation □ Computer network value of system/security admin logs □ Generation □ Computer network value of system/security admin logs □ Generation □ Computer network value of system/security admin logs □ Generation □ Computer network value of system/security admin logs □ Generation □ Computer network value of the functionals in facilities of the functional in facilities of											
Lower customerclelent/investor confidence	2	Did this company detect any inc	idents in which files	☐ Negative publicity							
Yes → How many incidents were detected?	u.	data, web pages or any part of it	s computer systems	Lower customer/client/investor confidence							
Did not know who to contact Incidents 7 Mark India apply. Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Incident outside jurisdiction of law enforcement Did not know who to contact Did not know who to contact Incidents indicated in 7a? Did not know who to contact Did not know who to be apaceticathing who have water Did not know who to be apaceticathing who have water Did not know who to be apaceticathing who have water Did not know who to be apaceticathing who have water Did not know who to be apaceticathing whave water Did not know who to be apaceticathing who have water		were electronically vandalized o	r sabotaged in 2005?	☐ Competitor advantage							
b. Which of the following types of security technology or practices were inadequate in preventing these incidents? **Nark** all that apply: Indemal computer security controls External controls External computer security (and the suspected offender and this company at the time of the incidents indicated in 72 Mark				Did not want data/hardware seized as evidence							
D. Which of the following types of security technology or practices were inadequate in preventing these incidents? Mark		\bigcirc No \rightarrow (If "No", skip to 8.)	Number								
were inadequate in preventing these incidents? Mark	b.	Which of the following types of s	security technology or practices								
casternal computer security controls Encryption Encryption Enternal computer security controls Software wulnerability/buffer overlead Ansi-virus software Review of system/security admin logs Computer network/watch center Physical/environmental security Passwords that must be changed Physical/environmental security Digital certificates Personnel policies Firewall Authorized access misused OMZ Host Other → Specify. Initiation Protection System Den't know De	۳.										
Software valentality/buffer overland Carella Carel		☐ Internal computer security controls	Encryption								
Anti-spyware/adware software Review of system/security admin logs Biometrics Computer network/watch center Configuration management Comfiguration management Physicalemvironmental security Insider - someone currently (or formetry) working for this company Current employee Curre		External computer security controls	Software vulnerability/buffer overload	Utilet—> Specify.							
Biometrics Configuration management		Anti-virus software	E-mail filters or review of e-mail logs								
Biometrics		Anti-spyware/adware software	Review of system/security admin logs								
Correst enployee Physical/environmental security Digital certificates Personnel policies Personnel poli		Biometrics	Computer network/watch center								
Passwords that must be changed Physical/environmental security Digital centificates Personnel policies Personnel policies Authorized access misused DMZ Host Other → Specify: Intrusion Detection System Don't know Don'		One-time password generators	Configuration management								
Digital certificates Personnel policies Firewall Authorized access misused DMZ Host Other → Specify: Outsider - someone who never worked for this company Domestic compettor Foreign competitor Specify country: Domestic competitor Specify: Domestic competitor Specify: Domestic competitor Spec		Passwords that must be changed	☐ Physical/environmental security								
DMZ Host Other → Specify: Domestic competitor Domestic company Domestic competitor Domestic backer Domestic b		☐ Digital certificates	Personnel policies								
DMZ-Host		Firewall	Authorized access misused								
Intrusion Petection System Don't know		☐ DMZ Host	\square Other \longrightarrow Specify:								
Intrusion Protection System		☐ Intrusion Detection System		_ _							
Cother hacker (origin unknown)		☐ Intrusion Protection System	☐ Don't know								
Cother hacker (origin unknown)	c	Which of the following were use	d accessed or affected in these	☐ Foreign hacker → Specify country:							
Wide area network (WAN)	С.		u, accessed, or affected in these	_							
Process control network (PCN) Stand-alone PCs (not on LAN) Virtual private network (VPN) Company-owned laptop Wireless network (e.g., 802.11) Laptop not owned by company Electronic data interchange (EDI) Other → Specify: Internet Don't know Don't know Don't know Local law enforcement State law enforcement FBI (Federal Bureau of Investigation) US-CERT (United States Computer Emergency Readiness Team) Cherr Georgia and Analysis Center) IntraGard None of the above None of the above None of the above None of the above None of the states Process control network (PCN) Stand-alone PCs (not on LAN) What was the total downtime (in hours) of each of the following due to these acts of vandalism or sabotage? ESTIMATES are acceptable. None of the following organizations were these incidents of company websites/ web servers. Don't know Don't know Don't know Don't know Don't know Don't know Don't know Don't know Don't know Don't		Local area network (LAN)	☐ Intranet	☐ Other → Specify:							
Virtual private network (VPN) Company-owned laptop Wireless network (e.g.,802.11) Laptop not owned by company Electronic data interchange (EDI) Other → Specify: Internet Don't know		☐ Wide area network (WAN)	☐ Extranet	☐ Don't know							
Wireless network (e.g.,802.11) Laptop not owned by company Electronic data interchange (EDI) Other → Specify: Internet Don't know Internet Internet Don't know Internet Don't know Internet Internet Don't know Internet Internet Don't know Internet Internet Internet Don't know Internet				h. What was the total downtime (in hours) of each of the following due							
Electronic data interchange (EDI) Other → Specify: Internet Don't know D			· · · · · · · · ·								
Internet				·							
d. To which of the following organizations were these incidents reported? Mark ■ all that apply. □ Local law enforcement □ State law enforcement □ State law enforcement □ US-CERT (United States Computer Emergency Readiness Team) □ Other Federal agency → Specify: □ CERT® Coordination Center □ ISAC (Information Sharing and Analysis Center) □ InfraGard □ None of the above What other above State		_	Other -> Specify.	1. Downtime of company websites/							
d. To which of the following organizations were these incidents reported? Mark ■ all that apply. □ Local law enforcement □ State law enforcement □ FBI (Federal Bureau of Investigation) □ US-CERT (United States Computer Emergency Readiness Team) □ Other Federal agency → Specify: □ CERT® Coordination Center □ ISAC (Information Sharing and Analysis Center) □ InfraGard □ None of the above 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ Hours □ EXCLUDE downtime reported above in item h,1 or 2. 3. Downtime of individual PCs/workstations □ FXCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such as labor, hardware, software, etc. □ EXCLUDE costs associated solely with the prevention of future incidents. 9. What other monetary losses and costs were incurred in 2005 due to these incidents? □ ESTIMATES are acceptable. □ INCLUDE actual losses such sate value of lost information. □ INCLUDE the estimated value of downtime, lost productivity, income from lost sales,			☐ Don't know	i iouis							
□ Local law enforcement □ State law enforcement □ State law enforcement □ State law enforcement □ FBI (Federal Bureau of Investigation) □ US-CERT (United States Computer Emergency Readiness Team) □ Other Federal agency → Specify: □ Other Federal agency → Specify: □ CERT® Coordination Center □ InfraGard □ InfraGard □ What other monetary losses and costs were incurred in 2005 due to these incidents? □ InfraGard □ What other monetary losses and costs were incurred in 2005 due to these incidents? □ INCLUDE actual losses such as the value of lost information. □ None of the above i. How much was spent in 2005 to recover from these incidents of vandalism or sabotage? ESTIMATES are acceptable. □ INCLUDE the estimated value of downtime, lost productivity, income from lost sales, □ 0 0 0	d.			3. Downtime of individual PCs/workstations Hours							
of vandalism or sabotage? ESTIMATES are acceptable. FBI (Federal Bureau of Investigation) US-CERT (United States Computer Emergency Readiness Team) Other Federal agency → Specify: CERT® Coordination Center ISAC (Information Sharing and Analysis Center) InfraGard None of the above What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such as labor, hardware, software, etc. EXCLUDE costs associated solely with the prevention of future incidents. What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE actual losses such sa the value of lost information. INCLUDE the estimated value of downtime, lost productivity, income from lost sales, 13532		Local law enforcement		EXCLUDE downtime reported above in item n, i or z.							
□ FBI (Federal Bureau of Investigation) INCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such as labor, hardware, software, etc. □ US-CERT (United States Computer Emergency Readiness Team) INCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such as labor, hardware, software, etc. □ CERT® Coordination Center EXCLUDE costs associated solely with the prevention of future incidents. Mil. Thou. Dol. □ InfraGard InfraGard INCLUDE actual losses and costs were incurred in 2005 due to these incidents? □ STIMATES are acceptable. INCLUDE actual losses such as the value of lost information. INCLUDE the estimated value of downtime, lost productivity, income from lost sales, 13532		State law enforcement									
Use Cert (United states Computer Emergency Readiness Team) □ Other Federal agency → Specify: □ CERT® Coordination Center □ ISAC (Information Sharing and Analysis Center) □ InfraGard □ None of the above EXCLUDE costs associated solely with the prevention of future incidents. J. What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE actual losses such as the value of lost information. INCLUDE the estimated value of downtime, lost productivity, income from lost sales,		FBI (Federal Bureau of Investigation)								
Other Federal agency → Specify: CERT® Coordination Center \$ solely with the prevention of future incidents. ISAC (Information Sharing and Analysis Center) InfraGard None of the above None of the above solely with the prevention of future incidents. Solely wit		US-CERT (United States Computer	Emergency Readiness Team)								
□ ISAC (Information Sharing and Analysis Center) □ InfraGard □ None of the above What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE actual losses such as the value of lost information. INCLUDE the estimated value of downtime, lost productivity, income from lost sales,		$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		solely with the prevention							
□ InfraGard □ None of the above □ INCLUDE actual losses such as the value of lost information. □ INCLUDE the estimated value of downtime, lost productivity, income from lost sales, □ 13532		☐ CERT® Coordination Center		of future incidents.							
ESTIMATES are acceptable. INCLUDE actual losses such as the value of lost information. INCLUDE the estimated value of downtime, lost productivity, income from lost sales,		☐ ISAC (Information Sharing and Analy	ysis Center)								
□ None of the above INCLUDE actual losses such \$ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		☐ InfraGard		ESTIMATES are acceptable.							
INCLUDE the estimated value of downtime, lost productivity, income from lost sales,		None of the above		INCLUDE actual losses such \$ 000							
lost productivity, income from lost sales,				INCLUDE the estimated value of downtime							
INDUCTOR LEES TO CLEES TO CLEE				lost productivity, income from lost sales,							



			•	-		•	、	
8.	EMBEZZLEMENT							
	Embezzlement is the unlawful misappropriation of money or other things of value, BY THE PERSON TO WHOM IT WAS ENTRUSTED (typically an employee), for his/her own use or purpose.							
	INCLUDE instances in which a computer was used to wrongfully transfer, counterfeit, forge or gain access to money, property, financial documents, insurance policies, deeds, use of rental cars, various services, etc., by the person to whom it was entrusted.							
a.	Did this company detect any incic computer was used to commit en this company in 2005?			nst				
	\bigcirc Yes \Longrightarrow How many incidents we	ere detected?			Τ			
	\bigcirc No \Longrightarrow (If "No", skip to 9.)				Nivers			
					Num	ıber		
b.	Which of the following types of s were inadequate in preventing the							oly.
	☐ Internal computer security controls	Encryption	1					
	External computer security controls	☐ Software v	/ulnei	rabili	ty/buf	ffer	over	oad
	Anti-virus software	E-mail filte	ers or	revie	ew of	e-n	nail le	ogs
	Anti-spyware/adware software	Review of	syste	em/se	ecurit	y ac	dmin	logs
	Biometrics	☐ Computer	Computer network/watch center					
	One-time password generators	☐ Configurat	Configuration management					
	Passwords that must be changed	☐ Physical/environmental security						
	☐ Digital certificates	Personnel	polic	ies				
	Firewall	Authorized	acce	ess r	nisus	ed		
	☐ DMZ Host	\square Other $ ightarrow$	Spe	cify:				
	☐ Intrusion Detection System							
	☐ Intrusion Protection System	☐ Don't know	v					
c.	Which of the following were used incidents? Mark ■ all that apply.	l, accessed, o	r affe	ecte	d in	the	ese	
	Local area network (LAN)	Intranet						
	☐ Wide area network (WAN)	Extranet						
	Process control network (PCN)	Stand-alone				AN)		
	☐ Virtual private network (VPN)	Company-ov	vned	lapto	op			
	☐ Wireless network (e.g.,802.11)	Laptop not o		-	comp	any		
	Electronic data interchange (EDI)	\square Other \longrightarrow S	Specif	fy:				
	☐ Internet							_
		☐ Don't know						
d.	To which of the following official of incidents reported? Mark ■ all that	•	wer	e the	ese			
	Local law enforcement							
	State law enforcement							
	FBI (Federal Bureau of Investigation)							
	US-CERT (United States Computer E	Emergency Readi	ness	Tea	m)			

 \square Other Federal agency \longrightarrow Specify: _ ☐ CERT® Coordination Center

☐ InfraGard ■ None of the above

☐ ISAC (Information Sharing and Analysis Center)

								,			
Э.	How many of these incidents were reported to the organizations specified in 8d?			Nu	mbe	r					
f.	If any incidents were not reported to the organizations specified in 8d, what were the reasons? Mark all that apply.										
	☐ Handled internally										
	Reported to third party contractor providing computer security services										
	☐ Reported to another organization → Specify:										
	☐ Negative publicity										
	Lower customer/client/investor confidence										
	Competitor advantage										
	Did not want data/hardware seized as evidence										
	☐ Did not know who to contact										
	☐ Incident outside jurisdiction of law enforcement										
	☐ Did not think to report										
	☐ Nothing to be gained/nothing worth pursuing										
	☐ Other → Specify:										
g.	What was the relationship between the susponent of the incidents indicate Mark all that apply.				der	and	l thi	s			
	☐ Insider - someone currently (or formerly) working for	r this	com	pan	y						
	Current employee										
	Current contractor, vendor, temporary worker, etc.										
	☐ Former employee, contractor, vendor, temporary wo	orker	, etc.								
	Outsider - someone who never worked for this comp	pany									
	☐ Domestic competitor										
	☐ Foreign competitor → Specify country:										
	☐ Domestic hacker										
	☐ Foreign hacker→ Specify country:										
	Other hacker (origin unknown)										
	☐ Other → Specify:										
	☐ Don't know										
h.	What was the dollar value of money or other	r thi	nae	tak	on						
••	by embezzlement in 2005?	The	_		Do	ol.					
	ESTIMATES are acceptable.			(0 0	0					
	Ψ[
i.	What other monetary losses and costs were due to these incidents? ESTIMATES are accelled INCLUDE the cost of diagnosis, repair and replay hardware, software, etc. If possible, include the downtime, lost productivity, income from lost sallegal or investigative work, etc. EXCLUDE costs associated Solely with the prevention of the cost of th	eptak acen estii	ole. nent mate labo	t suced very or or	ch as	s late of s for					
	solely with the prevention of future incidents.			(JU	U					



9. FRAUD

Fraud is the intentional misrepresentation of information or identity to deceive others, the unlawful use of credit/debit card or ATM or the use of electronic means to transmit deceptive information, in order to obtain money or other things of value. Fraud may be committed by someone inside or outside the company. INCLUDE instances in which a computer was used by someone

	inside or outside this company in or money, property, financial documen use of rental cars, various services, misrepresented identity, credit card	etc., by means of forgery,
	EXCLUDE incidents of embezzleme (Embezzlement) on page 7.	ent. Report these in 8
a.	Did this company detect any incidinside or outside this company us commit fraud against this company	sed a computer to
	\bigcirc Yes \Longrightarrow How many incidents we	ere detected?
	\bigcirc No \Longrightarrow (If "No", skip to 10.)	
b.	Which of the following types of so were inadequate in preventing the	ecurity technology or practices ese incidents? Mark all that apply
	☐ Internal computer security controls	☐ Encryption
	External computer security controls	Software vulnerability/buffer overload
	Anti-virus software	☐ E-mail filters or review of e-mail logs
	Anti-spyware/adware software	Review of system/security admin log
	Biometrics	Computer network/watch center
	One-time password generators	Configuration management
	Passwords that must be changed	Physical/environmental security
	Digital certificates	Personnel policies
	Firewall	Authorized access misused
	☐ DMZ Host	\square Other \Longrightarrow Specify:
	☐ Intrusion Detection System	
	☐ Intrusion Protection System	☐ Don't know
c.	Which of the following were used incidents? Mark ■ all that apply.	, accessed, or affected in these
	Local area network (LAN)	Intranet
	☐ Wide area network (WAN)	Extranet
	Process control network (PCN)	Stand-alone PCs (not on LAN)
	☐ Virtual private network (VPN)	Company-owned laptop
	☐ Wireless network (e.g.,802.11)	Laptop not owned by company
	☐ Electronic data interchange (EDI)	\square Other \longrightarrow Specify:
	☐ Internet	_
		☐ Don't know
d.	To which of the following organizationic incidents reported? Mark ■ all that	
	Local law enforcement	\square Other Federal agency \Longrightarrow Specify:
	State law enforcement	
	FBI (Federal Bureau of Investigation)	☐ CERT® Coordination Center
	US-CERT (United States Computer Emergency Readiness Team)	☐ ISAC (Information Sharing and Analysis Center)
		☐ InfraGard
		None of the above

e.	How many of these incidents were reported to the organizations specified in 9d?
f.	If any incidents were not reported to the organizations specified in 9d, what were the reasons? <i>Mark</i> all that apply.
	☐ Handled internally
	Reported to third party contractor providing computer security services
	☐ Reported to another organization → Specify:
	☐ Negative publicity
	Lower customer/client/investor confidence
	Competitor advantage
	Did not want data/hardware seized as evidence
	☐ Did not know who to contact
	☐ Incident outside jurisdiction of law enforcement
	☐ Did not think to report
	☐ Nothing to be gained/nothing worth pursuing
	☐ Other → Specify:
g.	What was the relationship between the suspected offender and this company at the time of the incidents indicated in 9a? Mark all that apply.
	☐ Insider - someone currently (or formerly) working for this company
	Current employee
	Current contractor, vendor, temporary worker, etc.
	Former employee, contractor, vendor, temporary worker, etc.
	Utsider - someone who never worked for this company
	Domestic competitor
	☐ Foreign competitor → Specify country:
	Domestic hacker
	☐ Foreign hacker → Specify country:
	Under hacker (origin unknown)
	☐ Other → Specify:
	☐ Don't know
L	What was the dellar value of manay or other things taken
h.	What was the dollar value of money or other things taken by fraud in 2005? Mil. Thou. Dol.
	ESTIMATES are acceptable.
	\$
i.	What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE the cost of diagnosis, repair and replacement such as labor, hardware, software, etc. If possible, include the estimated value of downtime, lost productivity, income from lost sales, labor or fees for legal or investigative work, etc. EXCLUDE costs associated solely with the prevention of future incidents.





10. THEFT OF INTELLECTUAL PROPERTY

	Theft of intellectual property is the illegal obtaining of copyrighted or patented material, trade secrets, or trademarks including designs, plans, blueprints, codes, computer programs, software, formulas, recipes, graphics, etc., usually by electronic copying.							
	EXCLUDE incidents of theft of personal or financial data such as credit card or social security numbers, names and dates of birth, financial account information, etc. Report these in 11 (Theft of Personal or Financial Data) on page 10.							
	EXCLUDE incidents of theft of any of Report these in 12 (Other Compute							
a.	Did this company detect any inci- inside or outside this company us obtain intellectual property from	sed a computer to						
	○ Yes → How many incidents we							
	\bigcirc No \Longrightarrow (If "No", skip to 11.)	Number						
b.	What type of intellectual property	was obtained? Mark all that appl						
	Copyrighted material	☐ Trade secrets						
	Patented material	☐ Trademarks						
c.	Which of the following types of so were inadequate in preventing the	ecurity technology or practices ese incidents? Mark all that apply.						
	☐ Internal computer security controls	Encryption						
	External computer security controls	Software vulnerability/buffer overload						
	Anti-virus software	☐ E-mail filters or review of e-mail logs						
	Anti-spyware/adware software	Review of system/security admin log						
	Biometrics	Computer network/watch center						
	One-time password generators	Configuration management						
	Passwords that must be changed	Physical/environmental security						
	Digital certificates	Personnel policies						
	Firewall	Authorized access misused						
	DMZ Host	☐ Other → Specify:						
	☐ Intrusion Detection System							
	☐ Intrusion Protection System	Don't know						
d.	Which of the following were used	_						
	incidents? Mark ■ all that apply.	_						
	Local area network (LAN)	Intranet						
	Wide area network (WAN)	Extranet						
	Process control network (PCN)	Stand-alone PCs (not on LAN)						
	☐ Virtual private network (VPN)	Company-owned laptop						
	Wireless network (e.g.,802.11)	Laptop not owned by company						
	Electronic data interchange (EDI)	\square Other \longrightarrow Specify:						
	Internet	Don't know						
		☐ Don't know						
e.	To which of the following organization incidents reported? Mark all that							
	Local law enforcement	☐ Other Federal agency → Specify:						
	State law enforcement							
	FBI (Federal Bureau of Investigation)	CERT® Coordination Center						
	US-CERT (United States Computer Emergency Readiness Team)	☐ ISAC (Information Sharing and Analysis Center)						
	,	☐ InfraGard						
		☐ None of the above						

f.	How many of these incidents were reported to the organizations specified in 10e?									
g.	If any incidents were not reported to the organizations specified in 10e, what were the reasons? <i>Mark</i> ■ <i>all that apply.</i>									
	Handled internally									
	Reported to third party contractor providing computer security services									
	☐ Reported to another organization → Specify:									
	☐ Negative publicity									
	Lower customer/client/investor confidence									
	☐ Competitor advantage									
☐ Did not want data/hardware seized as evidence										
	☐ Did not know who to contact									
	☐ Incident outside jurisdiction of law enforcement									
	☐ Did not think to report									
	Nothing to be gained/nothing worth pursuing									
	☐ Other → Specify:									
h.	What was the relationship between the suspected offender and this company at the time of the incidents indicated in 10a? Mark ■ all that apply.									
	☐ Insider - someone currently (or formerly) working for this company									
	Current employee									
	Current contractor, vendor, temporary worker, etc.									
	Former employee, contractor, vendor, temporary worker, etc.									
	Outsider - someone who never worked for this company									
	☐ Domestic competitor									
	☐ Foreign competitor → Specify country:									
	☐ Domestic hacker									
	☐ Foreign hacker → Specify country:									
	Other hacker (origin unknown)									
	☐ Other → Specify:									
	☐ Don't know									
	_									
i.	What was the dollar value of intellectual property taken by theft in 2005? ESTIMATES are acceptable. Mil. Thou. Dol.									
j.	What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE the cost of diagnosis, repair and replacement such as labor, hardware, software, etc. If possible, include the estimated value of downtime, lost productivity, income from lost sales, labor or fees for legal or investigative work, etc. EXCLUDE costs associated solely with the prevention of future incidents.									
k.	How many of the incidents indicated in 10a involved unlicensed use or copying (piracy) of digital products which this company developed for resale?									



Page 10

	III. TYPES OF COMPUTER SEC	CURITY INCIDENTS – Continued
1. THEFT OF PERSONAL OR FINANC	CIAL INFORMATION	e. To which of the following organizations were these
Theft of personal or financial informa		incidents reported? Mark ■ all that apply.
information that could potentially allo accounts under another name (individual)		☐ Local law enforcement ☐ CERT® Coordination Center
other entity). Personal information in	cludes names, dates of birth,	☐ State law enforcement ☐ ISAC (Information Sharing
social security numbers, etc. Financi debit/ATM card, account, or PIN nun		☐ FBI (Federal Bureau of Investigation) Emergency Readiness Team) and Analysis Center) ☐ InfraGard
EXCLUDE incidents of theft of intelle	ectual property such as	☐ US-CERT (United States Computer ☐ None of the above
copyrights, patents, trade secrets, ar these in 10 (Theft of Intellectual Prop		☐ Other Federal agency → Specify:
EXCLUDE incidents of theft of any o Report these in 12 (Other Computer		f. How many of these incidents were reported to the organizations specified in 11e?
a. Did this company detect any incid inside or outside this company us personal or financial information fr	ed a computer to obtain	g. If any incidents were not reported to the organizations specified in 11e, what were the reasons? <i>Mark</i> ■ <i>all that apply.</i>
○ Yes → How many incidents we	• •	☐ Handled internally
\bigcirc No \Rightarrow (If "No", skip to 12.)		Reported to third party contractor providing computer security services
O 110 / (iii 110 ; 510) to 12.)	Number	☐ Reported to another organization → Specify:
b. What type of personal or financial	information was obtained?	☐ Negative publicity
Mark ■ all that apply.		Lower customer/client/investor confidence
	r ATM card numbers	Competitor advantage
	nt or PIN numbers	Did not want data/hardware seized as evidence
Credit card numbers Other	Specify:	Did not know who to contact
c. Which of the following types of se		☐ Incident outside jurisdiction of law enforcement
	se incidents? Mark ■ all that apply.	☐ Did not think to report
Internal computer security controls	Encryption	☐ Nothing to be gained/nothing worth pursuing
External computer security controls	Software vulnerability/buffer overload	☐ Other → Specify:
Anti-virus software	E-mail filters or review of e-mail logs	
☐ Anti-spyware/adware software	Review of system/security admin logs	h. What was the relationship between the suspected offender and this
Biometrics	Computer network/watch center	company at the time of the incidents indicated in 11a? Mark ■ all that apply.
One-time password generators	☐ Configuration management	☐ Insider - someone currently (or formerly) working for this company
Passwords that must be changed	☐ Physical/environmental security	Current employee
☐ Digital certificates	Personnel policies	Current contractor, vendor, temporary worker, etc.
Firewall	Authorized access misused	
☐ DMZ Host	\square Other \Longrightarrow Specify:	Former employee, contractor, vendor, temporary worker, etc.
☐ Intrusion Detection System		U Outsider - someone who never worked for this company
☐ Intrusion Protection System	☐ Don't know	Domestic competitor
d. Which of the following were used,	accessed or affected in these	☐ Foreign competitor → Specify country:
incidents? Mark ■ all that apply.	accepta, or amortou in mices	☐ Domestic hacker
Local area network (LAN)	☐ Intranet	☐ Foreign hacker → Specify country:
☐ Wide area network (WAN)	Extranet	Other hacker (origin unknown)
Process control network (PCN)	Stand-alone PCs (not on LAN)	☐ Other → Specify:
☐ Virtual private network (VPN)	Company-owned laptop	☐ Don't know
☐ Wireless network (e.g.,802.11)	Laptop not owned by company	i. What was the dollar value of personal or financial information
☐ Electronic data interchange (EDI)	☐ Other → Specify:	taken by theft in 2005? Mil. Thou. Dol.
☐ Internet		ESTIMATES are acceptable.
	Don't know	*
		j. What other monetary losses and costs were incurred in 2005 due to these incidents? ESTIMATES are acceptable. INCLUDE the cost of diagnosis, repair and replacement such as labor, hardware, software, etc. If possible, include the estimated value of downtime, lost productivity, income from lost sales, labor or fees for legal or investigative work, etc. EXCLUDE costs

associated solely with the prevention of future incidents.



	III. 1 11 20 01 00 IIII 012K 020									
2. OTHER COMPUTER SECURITY	INCIDENTS	f. How many of these incidents were reported								
INCLUDE all other computer secu company's computer networks—si		to the organizations specified in 12e?								
spyware, theft of other information		g. If any incidents were not reported to the organizations listed in								
damage or losses were sustained		12e, what were the reasons? Mark ■ all that apply.								
EXCLUDE incidents already repor	ted in this survey.	☐ Handled internally								
a. Did this company detect any oth incidents in 2005?	ner computer security	 ☐ Reported to third party contractor providing computer security services ☐ Reported to another organization → Specify: 								
	vere detected?									
\bigcirc No \rightarrow (If "No", skip to 13.)		☐ Negative publicity								
	Number	Lower customer/client/investor confidence								
b. What other types of computer so in 2005? Mark ■ all that apply.	ecurity incidents were detected	☐ Competitor advantage ☐ Did not want data/hardware seized as evidence								
☐ Hacking ☐ Spyware, keystrok	e logging	Did not know who to contact								
Spoofing Adware		☐ Incident outside jurisdiction of law enforcement								
☐ Phishing ☐ Other malware		Did not think to report								
	a not also also are artist in 40 and 44	☐ Nothing to be gained/nothing worth pursuing								
on pages 8 or 9 -	n not already reported in 10 or 11 → Please describe:	Other -> Specify:								
☐ Pinging —————		Guidi Godony.								
☐ Scanning ☐ Other → Please	describe:	h. What was the relationship between the suspected offender and this company at the time of the incidents indicated in 12a?								
	security technology or practices hese incidents? Mark all that apply.	Mark ■ all that apply.								
☐ Internal computer security controls	☐ Encryption	Insider - someone currently (or formerly) working for this company								
External computer security controls	Software vulnerability/buffer overload	Current employee								
Anti-virus software	E-mail filters or review of e-mail logs	Current contractor, vendor, temporary worker, etc.								
Anti-spyware/adware software	Review of system/security admin logs	Former employee, contractor, vendor, temporary worker, etc.								
Biometrics	Computer network/watch center	Outsider - someone who never worked for this company								
☐ One-time password generators ☐ Configuration management		☐ Domestic competitor								
Passwords that must be changed Physical/environmental security		☐ Foreign competitor → Specify country:								
☐ Digital certificates ☐ Personnel policies		Domestic hacker								
☐ Firewall	Authorized access misused	☐ Foreign hacker → Specify country:								
DMZ Host	☐ Other → Specify:	Other hacker (origin unknown)								
☐ Intrusion Detection System		U Other → Specify:								
☐ Intrusion Protection System	Don't know	☐ Don't know								
	d, accessed, or affected in these	 i. If any, what was the total downtime (in hours) of each of the following due to these other computer security incidents? ESTIMATES are acceptable. 								
Local area network (LAN)	☐ Intranet	INCLUDE downtime needed for repair. 1. Downtime of company websites/ Hours								
☐ Wide area network (WAN)	☐ Extranet	web servers								
Process control network (PCN)	Stand-alone PCs (not on LAN)	2. Downtime of servers, routers or switches FXOLUDE downtime reported by the service item.								
☐ Virtual private network (VPN)	Company-owned laptop	EXCLUDE downtime reported above in item i,1.								
Wireless network (e.g.,802.11)	Laptop not owned by company	3. Downtime of individual PCs/workstations Hours EXCLUDE downtime reported above in item i,1 or 2.								
Electronic data interchange (EDI)	☐ Other → Specify:									
Internet	☐ Don't know	j. How much was spent in 2005 to recover from these other computer security incidents? ESTIMATES are acceptable.								
e. To which of the following organize		INCLUDE the cost - both internal and external - of diagnosis, repair, and replacement such as labor, hardware, software, etc.								
incidents reported? Mark ■ all th		EXCLUDE costs associated Mil. Thou. Dol. solely with the prevention								
Local law enforcement	☐ Other Federal agency → Specify:	of future incidents. \$ 0 0 0								
State law enforcement		k. What other monetary losses and costs were incurred in 2005								
FBI (Federal Bureau of Investigation	<u> </u>	due to these incidents? Mil. Thou. Dol.								
US-CERT (United States Computer Emergency Readiness Team)	☐ ISAC (Information Sharing and Analysis Center)	ESTIMATES are acceptable. INCLUDE actual losses such \$ 0 0 0 as the value of lost information.								
	☐ InfraGard	INCLUDE the estimated value of downtime, 13532								
	☐ None of the above	lost productivity, income from lost sales, abor or fees for legal or investigative work, etc.								

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IV. OTHER TRENDS IN COMPUTER SECURITY

13. In 2005, did this company detect any computer security breaches that resulted from information obtained from a stolen laptop computer?	17. In 2005, which of the following Internet services, if any, did this company provide to other companies or individuals as its PRIMARY line of business? <i>Mark</i> ■ <i>all that apply.</i>
○ Yes → How many incidents were detected?	☐ Internet Service Provider (ISP)
○ No Number	☐ Web Search Portal
Number	☐ Other Internet service → Specify:
14. In 2005, was the overall number of computer security incidents detected by this company more, less or about the same compared the number detected in 2004 regardless of whether damage or los were sustained as a result? Mark ● only one.	ses 18 a. What were the total operating revenue, sales, and/or receipts
○ More in 2005	for this company Bil. Mil. Thou. Dol. in 2005?
O Less in 2005	ESTIMATES are \$ 000
About the same	
O Don't know	
15. In 2005, did this company have a separate insurance policy or ride to cover losses due specifically to computer security breaches? Yes No Don't know	b. What percentage of this total was derived from e-commerce? ESTIMATES are acceptable. INCLUDE any transaction completed over a computer-mediated network that involves the transfer of ownership or rights to use goods or services. For example, taking orders for merchandise or services, transferring information or rights, paying accounts, etc.
16. In 2005, what percentage of this company's business was transacted over the Internet, Intranet, Extranet, EDI, etc.? ESTIMATES are acceptable. INCLUDE any transaction completed over a computer-mediated network that involves the transfer of ownership or rights to use goods or services. For example, taking orders for merchandise or services, transferring information or rights, paying accounts, etc.	 19. What was the total number of employees on this company's payroll for the pay period which includes March 12, 2005? ESTIMATES are acceptable. Count EACH part-time employee as one. EXCLUDE contractors, vendors, leased and temporary employees. 20. Does the information reported in this survey cover calendar year 2005, fiscal year 2005 or some other time period? ○ Calendar year 2005 ○ Fiscal year 2005 or some other time period → Specify period covered:
	7 Iscal year 2003 of some other time period 7 Specify period covered.
	FROM: TO: TO: Month Year
	21. Does the information reported in this survey include this company or does it include this company and some or all of its subsidiaries. For this survey, subsidiary means a company in which this company had more than 50% ownership, or in which this company has the power to direct or cause the direction of management and policies. Information includes this company only - company has no subsidiaries, or responses exclude subsidiaries Information includes this company and some or all of its subsidiaries - How many subsidiaries were included?

V. COMPANY INFORMATION



Number

(Tear off sheet - identifying information will be separated from survey responses upon receipt by RAND.)

CONTACT INFORMATION

Person to contact regarding this report:	Ple	ease	list	t sul	bsid	liari	es	inc	lud	ed i	in t	his	rep	or	t:					
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2005 NATIONAL COMPUTER SECURITY SURVEY INSTRUCTIONS

PURPOSE OF THE SURVEY

The purpose of this survey is to collect information about the nature and extent of computer security incidents experienced by businesses located in the U.S. The data you report will provide information on the impact of computer crime on businesses.

Specifically, data from the 2005 National Computer Security Survey will provide information on the frequency and types of crime involving computers, the monetary losses sustained as a result of computer crime, and the cost of computer security.

LEGAL AUTHORITY AND CONFIDENTIALITY

Your report is confidential by law (P.L. 107-347, Title V and 44 U.S.C. § 3501 note). It may be seen only by persons certified to uphold the confidentiality of this information and used only for statistical purposes from which no firm may be identified. The law also prohibits the sharing of your data with other agencies, exempts the information you provide from requests made under the Freedom of Information Act, and ensures that your responses are immune from legal process.

BURDEN HOUR ESTIMATE

Respondents are not required to respond to any information collection unless it displays a valid approval number from the Office of Management and Budget. Public reporting burden for this collection of information is estimated to vary from 45 minutes to 3 hours per response, with an average of $1\frac{1}{2}$ hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Bureau of Justice Statistics, National Computer Security Survey, Washington, DC 20531; and to the Office of Management and Budget, OMB No. 1121-0301, Washington, DC 20503.

GENERAL INSTRUCTIONS

Survey Scope – This survey collects computer security data for companies, organizations and associations operating within the United States. **Information for business-related activities of religious organizations, nonprofit organizations and organizations that are government owned but privately operated should be included.**

Reporting Entity – Report computer security data for all **domestic operations** of your company, including all divisions and locations. A company is a business, service or membership organization consisting of one or more establishments under common ownership or control. **Do not report for subsidiary companies that your company may hold, as they may be surveyed separately. For this survey, subsidiary means a**

company in which this company has more than 50% ownership, or in which this company has the power to direct or cause the direction of management and policies. *Use figures that include subsidiaries only if figures that exclude subsidiaries are not available.* For purposes of this survey, exclude data for Puerto Rico, the Virgin Islands and U.S. Territories. If you are unable to consolidate records for the entire company minus subsidiaries or have reporting questions, please call **1–800–734-5399**.

How to Report Dollar Figures – Dollar figures should be **rounded** to thousands of dollars.

For example, if the figure is \$1,023,528.79, enter:

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If the figure is less than \$500.00, enter:

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Estimates are acceptable – The data requested on the National Computer Security Survey may not correspond to your company's records. If you cannot answer a question from your company records, please provide a carefully prepared estimate.

Reporting Period – Report data for calendar year 2005. If you cannot provide data on a calendar year basis, fiscal year 2005 data are acceptable. If this company was not in operation for the full year, report for the period of time it was in operation. Indicate in Question 20, Report Period, the exact dates the data represent if they are not for the calendar year.

Additional Forms – Photocopies of this form are acceptable. If you require additional forms, contact us at the toll-free number, e-mail address, or business address provided below.

Filing the Report Form – Return your completed form in the pre-addressed envelope. If you are not using the pre-addressed envelope, return it to the address provided at the bottom of this page or fax it to 1–877-814-6673.

RAND Corporation Survey Research Group

1776 Main Street P.O. Box 2138 Santa Monica, CA 90407-2138

Direct any **QUESTIONS** regarding this form to:

Toll-free Number: 1-800-734-5399 FAX Number: 1-877-814-6673 E-mail: ncss@rand.org

GLOSSARY OF TERMS

Adware – A software application that automatically displays advertisements, typically in the form of pop-up windows. Adware sometimes includes spyware.

Anti-spyware/adware software — A utility that looks for spyware and/or adware and alerts the user to any that are found.

Anti-virus software – A utility that looks for viruses and alerts the user to any that are found.

Biometrics – Methods of generating authentication information for a person by digitizing measurements of a physical characteristic, such as a fingerprint, a hand shape, a retinal pattern, a speech pattern (voice print), or handwriting.

Business continuity plan for computer systems – The procedure an organization uses to maintain essential functions during and after a disaster, such as a dual back-up system at a separate physical location. It seeks to ensure the uninterrupted provision of mission-critical functions. It often includes a disaster recovery plan.

Company laptops – Any laptop computer issued by this company, whether owned or leased.

Computer/network watch center – The location from which control is exercised over a communications network, usually either telephony or Internet, though sometimes also that of a public utility. It is sometimes also the location containing many or all of the primary servers and other equipment that runs an internet service provider. This center is also where the technicians that maintain the servers, develop new software, and troubleshoot outages are located.

Configuration management – The management of security features and assurances through control of changes made to hardware, software, firmware, documentation, test fixtures, and test documentation of an automated information system, throughout the development and operational life of a system. Includes Source Code Management or revision control. The control of changes—including the recording thereof—that are made to the hardware, software, firmware, and documentation throughout the system lifecycle.

Corporate policy on computer security – A defined set of practices and guidelines established by the organization to deal with issues involving computer security. Such practices and guidelines can encompass the responsibilities of both the organization and its employees. Employees have been made aware of this policy.

Digital certificates – An attachment to an electronic message used for security purposes. The most common use of a digital certificate is to verify that a user sending a message is who he or she claims to be, and to provide the receiver with the means to encode a reply.

Disaster recovery plan for computer systems – A procedure to restore an organization's mission-critical functions after, and to minimize the effects of, a major interruption of computer services. It includes procedures for reporting specific types of problems to designated personnel, repairing or replacing damaged systems, etc.

DMZ Host – A small network that acts as a "neutral zone" between a company's internal network and an external network such as the Internet. A DMZ host is usually inserted behind or between firewalls.

Electronic Data Interchange (EDI) – A proprietary electronic system used for exchanging business data over a computer network.

E-mail logs or filters – E-mail logs keep track of incoming/outgoing messages, including the sender and the recipient. Filters are an automated method of searching the content of e-mail for words, viruses, or misuse of computer resources.

Encryption — The translation of data into a format that requires a code to restore it to the original format. To read an encrypted file, you must have access to a secret key or password that allows you to decrypt it.

Equipment decommissioning – A procedure used for removing computer equipment from active use within an information system or network. This involves changing settings within the system to reflect their absence, and the removal of all sensitive information from the computer equipment, particularly from hard drives and other media.

External computer security controls – Hardware, software, and/or company policies and practices limiting the access of outsiders to the company's computer systems and networks.

Extranet – A network that uses Internet/Intranet technology to make information available to authorized outsiders. It allows businesses to securely share information with selected suppliers, partners, customers, or other businesses.

Firewall — Hardware and/or software designed to prevent unauthorized access to or from a private network, particularly networks with Internet or Intranet connectivity.

Formal computer security audit standards – An established or authoritative set of criteria used to review computer security systems.

Hacker – An unauthorized person who cracks a computer system or exceeds authorized access for malicious intent or for the thrill of the challenge.

Hard-wired telecommunication lines – Telecommunication lines that are copper or fiber-optic and stationary, as opposed to wireless.

Identification of company's critical assets – Determining the critical functions that the organization performs, and the assets (such as information and telecommunication systems) upon which those functions are vitally dependent. Those critical assets are ones for which special security and reliability measures should be focused.

Insurance covering computer security breaches – This type of insurance specifically covers losses due to computer break-in exposures, usually in a separate policy or rider. The coverage is typically called network security liability, e-commerce liability, Internet security liability, or hacker insurance.

Internal computer security controls – Hardware, software, and/or company policies and practices limiting the access of insiders—employees, contractors, vendors, etc.—to the company's computer systems or networks. These controls may vary by department and/or employee function.

Internet – Inter-connected networks linking millions of computers globally. Users can access information and applications from other computers and communicate with other users.

Intranet – An internal network similar to the Internet but surrounded by a firewall to prevent access from users outside the company, organization, or facility.

Intrusion detection system – An intrusion detection system examines all inbound and outbound network activity and identifies suspicious patterns that may signal a network or system attack from someone attempting to break into or compromise a system.

Intrusion/penetration testing of computer security — A method of evaluating the security of a computer system and identifying its vulnerabilities by attempting to circumvent or override system security through the simulation of an attack by a malicious actor.

Intrusion protection system – A suite of access control tools used to protect computers from exploitation. Intrusion protection systems may also act at the host level to deny potentially malicious activity.

Local area network (LAN) – A computer network that spans a small area such as a single building or group of buildings.

Malware – Malicious software or code developed to serve a harmful purpose. Specific types of malware include viruses, worms, Trojan horses, spyware, and adware.

Misuse of computers by employees (Internet, e-mail, etc.) — The improper use of company computer resources by employees, such as using the company's computer resources for personal gain, sending personal or improper e-mail, abusing Internet privileges, loading unlicensed software, etc.

Non-company laptop – Any laptop computer not issued by this company (e.g., belonging to a consultant, vendor, contractor, etc.).

One-time password generators (smart cards, tokens, keys) – A "one-time password generator" is an authentication device such as a one-time token which randomly changes all or part of the user's password, typically every minute, so that the same password is never used more than once. This technique counters the threat of a replay attack that uses passwords captured by spyware, wiretapping, or other means of hacking.

Passwords that must be changed periodically – A simple authentication technique in which each password is used repeatedly for a specific period of time to verify an identity.

Periodic computer security audits – Reviews conducted periodically by the company's security office. For example, the company's strike team might simulate computer security situations and then evaluate how the company performed.

Phishing – The creation and use of fraudulent but legitimate-looking e-mails and web sites to obtain users' personal and financial account information for criminal purposes.

Physical/environmental security (e.g., limited physical access, sprinklers) – Security measures focused on limiting physical access to critical organization assets, and protection of those assets from physical malicious attacks (e.g., explosions) or natural disasters (earthquakes, fire, flood).

Pinging – A basic test of whether a particular host is operating properly and is reachable on the network from the testing host by sending a special packet of information and awaiting its response. Malicious use includes flooding the Internet with ping requests attempting to locate new hosts to infect, causing problems to routers across the Internet.

Piracy - see Unlicensed use or copying.

Process control network (PCN) – A network with an automated control of a process, such as a manufacturing process or assembly line. It is used extensively in industrial operations, such as oil refining, chemical processing, and electrical generation. It uses analog devices to monitor real-world signals and digital computers to do the analysis and controlling. It makes extensive use of analog/digital, digital/analog conversion.

Publicly accessible website WITH e-commerce capabilities – E-commerce capabilities refer to the ability of this company's customers or suppliers to effect transactions via computer networks. Such transactions commit the company and the customer/supplier to an exchange, though they do not necessarily include making payment associated with the commitment. For example, if a customer orders products via a website with payment made by check at a later date, this is an e-commerce transaction.

Regular review of system administrative logs – Reviewing system administrative logs on a regular basis to detect suspicious activity beyond normal daily activity.

Remote dial-in access – Refers to using devices and other resources that are not connected directly to a workstation to connect to another computer device. Do not include network access through the Internet.

Scanning – A method of searching for open ports by sending packets or requests for information.

Server – A computer or device on a network that manages network resources. For example, a file server is a computer and storage device dedicated to storing files. A print server is a computer that manages one or more printers. A network server is a computer that manages network traffic.

Sniffing – Packet sniffing is a form of wire-tap applied to computer networks instead of phone networks. Traffic on a network segment passes by all hosts attached to that segment. Ethernet cards have a filter that prevents the host machine from seeing traffic addressed to other stations. Sniffing programs turn off the filter, and thus see everyone's traffic.

Spoofing — The creation of TCP/IP packets using someone else's IP address. A "spoofed" IP address is therefore misleading regarding the true source of an Internet message packet.

Spyware – Software that surreptitiously monitors the user and transmits the information to a third party. Some spyware can intercept or take partial control of a computer's operation. Spyware differs from viruses and worms in that it does not usually self-replicate.

Stand-alone PCs (not on LAN) — Computers that are not connected to company networks, such as a stand-alone workstation. For the purposes of this survey, a stand-alone computer may have Internet access.

System administrative logs – Logs which document details of access to computer systems, such as who logged in, which parts of the system were accessed, and when the user logged in and out.

Training employees in computer security practices – Training session(s) designed to educate employees on issues dealing with computer security and the employee's role in following the organization's computer security practices.

Trojan horse – A program that overtly does one thing while covertly doing another.

Unlicensed use or copying (piracy) of digital products developed for resale – The unauthorized copying or use of digital products — such as software, music, or motion pictures — which the company developed or for which it holds the copyright. Report unauthorized copying or use of other software by employees under "Misuse of computers by employees (Internet, e-mail, etc.)."

Virtual private network (VPN) — A network that is constructed by using public wires to connect nodes. For example, systems that allow you to create networks using the Internet as the medium for transporting data. These systems use encryption and other security mechanisms to ensure that only authorized users can access the network.

Virus – A hidden fragment of computer code which propagates by inserting itself into or modifying other programs.

Vulnerability/risk assessment – Assessment of threats to, impacts on, and vulnerabilities of information and information-processing facilities and the likelihood of their occurrence.

Wide area network (WAN) – A computer network that spans a large geographical area. Usually, a WAN consists of two or more LANs.

Wireless networks (e.g., 802.11) — A type of LAN that uses high-frequency radio waves or lasers rather than wires to communicate between nodes. 802.11 refers to a family of specifications for an over-the-air interface between a wireless client and a base station or between two wireless clients.

Wireless access to e-mail, Internet and/or this company's other networks — Wireless access refers to the use of a device or system that will enable access to a network to which it is not physically connected. For example, access via a cellular or digital phone, some personal digital assistants (PDAs), some laptop computers, thin client, broadband, etc.

Worm – A self-replicating computer program, similar to a computer virus. A virus attaches itself to, and becomes part of, another executable program; however, a worm is self-contained and does not need to be part of another program to propagate itself. They are often designed to exploit the file transmission capabilities found on many computers.